

Title (en)

Method and apparatus for block coding vertical mode codes for enhanced compression of image data.

Title (de)

Verfahren und Vorrichtung zur Blockkodierung von Vertikalmodekoden für Bilddatenkomprimierung.

Title (fr)

Procédé et appareil de codage en blocs de codes en mode vertical pour comprimer des données d'images.

Publication

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Application

EP 87110735 A 19870724

Priority

US 90582986 A 19860910

Abstract (en)

A method and apparatus for improving the performance of data compression processes, such as relative address coding, CCITT standard facsimile processes, and similar two-dimensional image coding processes, by block coding one or more of the vertical mode codes produced by these processes. The performance of data compression processes is improved by representing one or more sequences of vertical mode code words with a single block code word. A reference scan line is preferably selected from among a plurality of previous scan lines, for example, the immediately preceding ten scan lines, for two-dimensional image coding. The previous scan line which is most similar to the current scan line to be coded is selected as the reference scan line. The selected reference scan line is then fed with the current scan line to be coded to a two-dimensional data compression coding process so as to yield a first tier of data compression. The image data are preferably checked during the two-dimensional data compression coding process for a predetermined run of a given vertical mode code, and a preselected block code is substituted if the predetermined run of the given vertical mode code appears so as to yield a second tier of data compression. Preferably, eleven consecutive vertical offset zero code words are represented by a single block code word. This provides enhanced data compression and reduces the amount of image data stored or transmitted and concomitantly lowers the cost for operation of the image data storage or transmission apparatus.

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